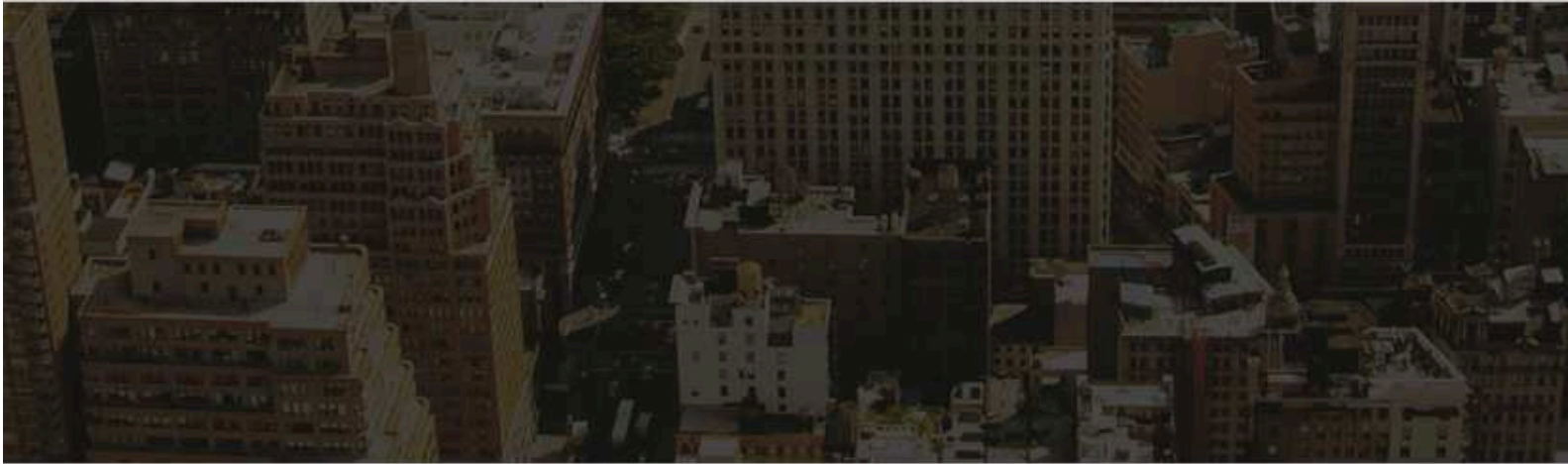


AMPS Proceedings Series 10



Cities, Communities and Homes:
Is the Urban Future Livable?

AMPS CONFERENCE 10

Cities, Communities and Homes: Is the Urban Future Livable?

AMPS, Architecture_MPS; University of Derby
22—23 June, 2017

Cities, Communities and Homes: Is the Urban Future Livable?

SERIES EDITOR:

Dr. Graham Cairns

EDITOR:

Eleni Tracada and Graham Cairns

PRODUCTION EDITOR:

Eric An

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INTRODUCTION

This publication is the product of the conference *Cities, Communities and Homes: Is the Urban Future Livable?* held at the University of Derby in 2018. The premise of the conference and this publication is that the forces shaping life in cities are complex. The economies they are based on are multiple. Some are growing exponentially, others are shrinking. Some pride themselves on architectural heritage, others are seeking to build and rebrand. Some are old, some are new. Inevitably their urban fabrics vary. The communities that live in these places reflect these conditions. Some are long-standing, others are new and in-formation. Sometimes they are active, on occasion homogenous. More generally they are diverse. These communities need, and want, a say in their futures. Some are well connect and affluent, others suffer deprivation and social exclusion. A constant in the mist of this complexity is their need to be housed – whether by themselves, the market, or governments.

The conference and this subsequent publication seek to explore how the three issues of city development, sense of community and housing need, all combine to make lives in our cities livable – or not. How will our urban environments change in the near future? Are the cities we live in now likely to contract or expand? How will these changes impact on communities and the way they are housed? Will new technologies facilitate community engagement with planning? Will resident voices be heard by planners? Will unaffordable housing turn some cities into enclaves of the wealthy, or will the private sector and personal preference gate our communities?

-

This publication, and the conference which it documents, were organised by the research organisation AMPS, its academic journal Architecture_MPS, and the College of Engineering & Technology at the University of Derby. It formed part of the AMPS program of events, *Housing – Critical Futures*.

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WHY CAN'T WE LIVE TOGETHER? STOCKHOLM – VIENNA'S LARGE COURTYARD BLOCKS

AUTHORS:

CHIARA MONTERUMISI, ALESSANDRO POROTTO

INSTITUTION:

ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE, SWITZERLAND

INTRODUCTION

The aim of this paper is to look back on some valuable accomplishments of metropolitan housing districts built at the beginning of the 20th century in Stockholm (1916-1930) and Vienna (1919-1933). Far from revising the narratives of modern history, those first attempts demonstrate how housing turned into a core-concern from that time, unlike the historians take as a starting point all those examples employing radical and functionalist models. The apt motto “from the block to the bar”¹ marked out this transition. On the occasion of the *IFHTP - International Federation for Housing and Town Planning* in Vienna (1926) and later the first *CIAM - Congrès international d'architecture moderne* (1928) in Switzerland, there emerged a worldwide effort of theory and policy to respond to a serious housing shortage. Two contrasting urban and typological models animated the debate: the large courtyard block and the north-south oriented bars. Nevertheless, leading avant-garde figures mostly shifted their attention away from the densely built-up block of the 19th century city in favour of green settlements and housing estates.

The goal of this contribution is hence to examine in greater detail the large courtyard block through two case studies in Stockholm and Vienna. This type of building was defined by Walter Gropius and Ernst May as a mere intermediate step in the evolution², but in actual fact it presented remarkable architectural qualities of morphology and spatial sequence. The large courtyard block was a convincing achievement in the process of reforming the urban perimeter block and it was a dominant and long-lasting model in some European cities. Such modern housing policies significantly influenced the history and structure of cities, as may be seen in today's Stockholm and Vienna urban layout (Figure 1).

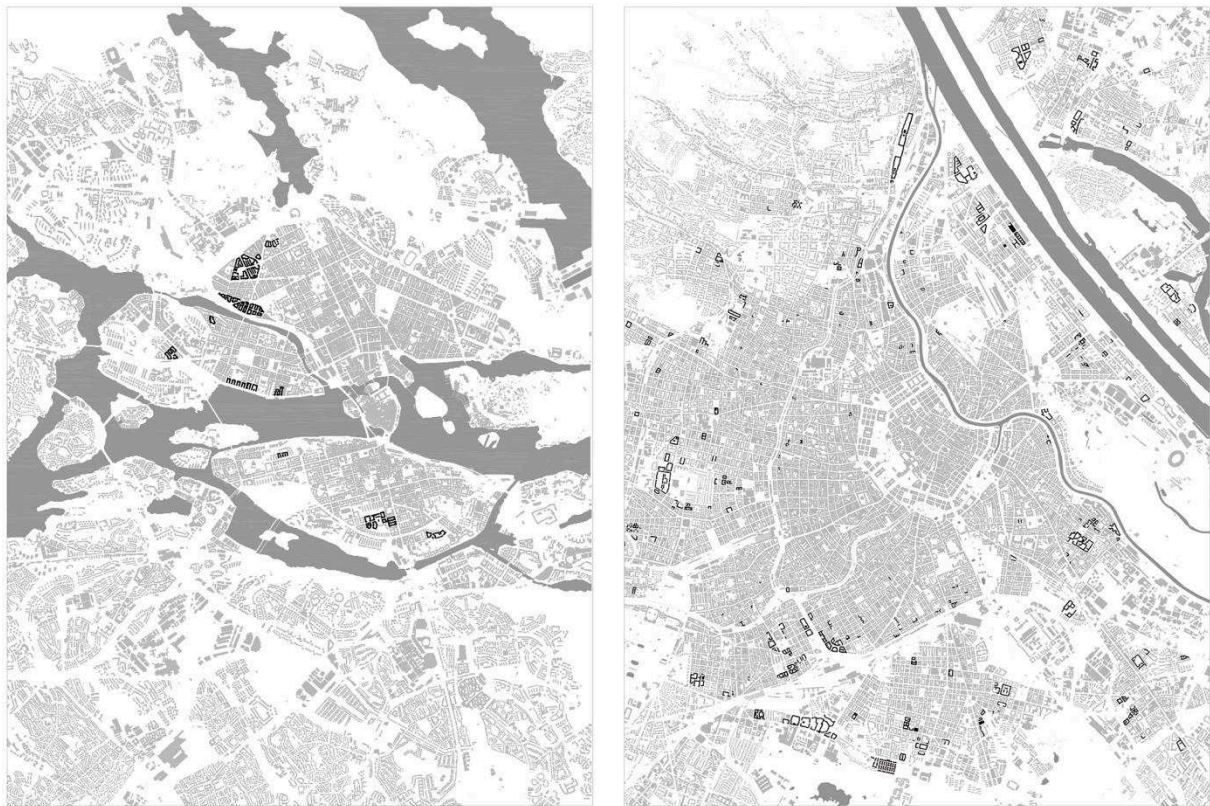


Figure 1. Stockholm and Vienna: urban housing districts in the interwar period

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Housing started to become a public utility, part of a wider and multifaceted social vision. At the turn of the 20th, the response to accelerated metropolitan growth, an acute housing shortage³ and increased building costs came first in the form of continuous fabrics of high density multi-story or provisional barrack quarters in the city outskirts⁴. Later, a favourable political and cultural milieu in both cities paved the way for approval of land policies and strategic urban plans allocating copious dwelling complexes equipped with improved sanitary conditions and many more facilities⁵. The attention and the responsibility of planners, architects, cooperatives, and politicians focused on “the families (that) are the foundation upon which the society is built”⁶ and on “large masses of population”⁷. In Sweden town planners of the municipality liaised with housing cooperatives in conducting these programmes, whereas in Vienna the municipality was alone responsible⁸.

In comparing the case studies – *Humleboet* in Stockholm and *Fuchsenfeldhof* in Vienna (Figure 2) – one will recognize some formal and spatial analogies behind the attempt to reform the layout of the city and the conditions of living together. These large courtyards⁹, carefully designed as a fine balance between green and paved areas, formed an appropriate living space for the community. The analysis is here carried out from original photos and re-drawings of plans done by the authors¹⁰. Curiously, the two projects here investigated are also linked by an article published in the Swedish magazine *Vår bostad*¹¹, dealing with the great Viennese effort to increase housings, and in particular with the *Fuchsenfeldhof*.

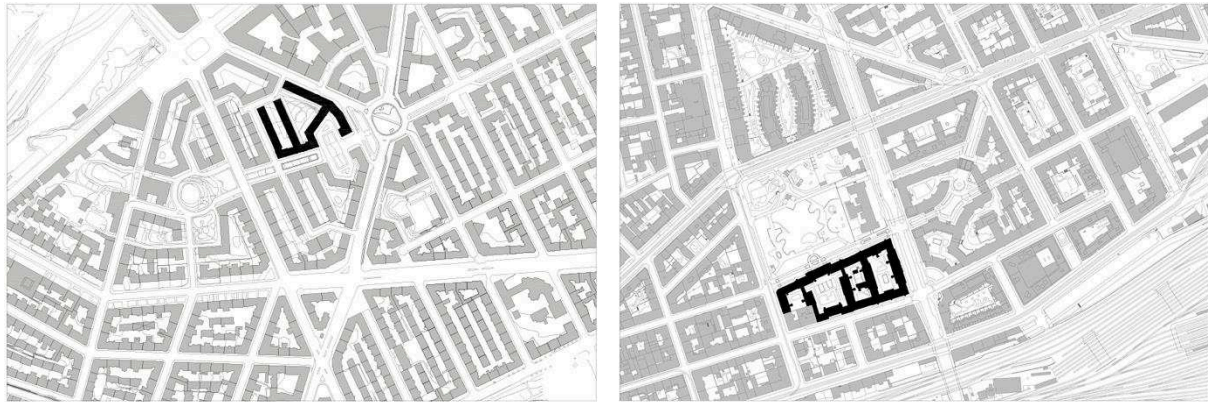


Figure 2. Humleboet and Fuchsenfeldhof in the urban fabric

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STOCKHOLM

Humleboet belongs to a wider housing complex called *Röda Bergen* (Red Mountains). It is an extensive hilly area in the north-west part of the unbuilt outskirts. The peculiar features of the area interrupted the orthogonal east-west oriented grid-plan (*Lindhagenplanen*, 1866)¹² causing radical changes to the pattern of streets and building lots.

The layout of today's site-plan does not entirely correspond with the first urban plan (1907-1909) drew up by Per Olof Hallman¹³. He was the first to introduce Raymond Unwin and Camillo Sitte's theories in Sweden, planners with whom he also had a close relation. Hallman tackled the irregular lie of the land by designing large partially opened courtyard blocks and buildings for the community (e.g. kindergarten, church and school). The picturesque result was a peculiar conflation of the two planning sources of reference previously mentioned, with which presents some points in common. Before the World War I an extensive portion of the South blocks, particularly those buildings facing onto the wide alley, were built. After the war, the urban plan was slightly revised by Sven Wallander and Sigurd Lewerentz who stressed symmetry and regularity more than before. However, the separation between traffic-bearing roads and residential streets remained. The merging of two topographically different areas – the two halves of the hexagon – by means of two main orthogonal axes was kept as well: the regular straight North-South alley was somewhat enlarged and the East-West axis presented some changes in its irregular widenings and narrowings, affecting the sequence of collective spaces.

What radically changed was the dwelling type employed: they substituted semi-detached and single-family houses, with multi-storey mass-buildings, whose ground floors were frequently used as shop, atelier, or common utilities. Wallander and Lewerentz captured the real needs of the Swedish population, seeking functional solutions for allocating families, especially elderly and low-income people. *Röda Bergen* presents an irregular hexagon shape formed by eleven large courtyard blocks. *Humleboet* (Figure 2) together with the partial symmetrical facing block is situated in the Eastern entry side of the district along one the two main street axes¹⁴. It consists of seven blocks of different shapes and sizes due to the local cadastral system, which actually even regulated the names of town lots. In 1924-1927 five architects, of whom Wallander was the leading figure in the *HSB* cooperative¹⁵, designed *Humleboet*¹⁶.

The layout of *Röda Bergen* comprises a series of interconnected spaces largely consisting of partially open courtyard blocks, stairways and right-angled or curving streets. Apart from the two large ones in

the north, the remaining courtyards are usually not completely enclosed by building blocks, but open to the street and the park. One should note that there were courtyards shared by inhabitants of all the quarter and others exclusively accessible to people living in the blocks facing the courtyard. All these design choices reveal a decisive improvement in the spatial and collective qualities of the large courtyard block. On the one hand, one clearly feels Sitte's ambition for the «city as unitary expression of the collective identity»¹⁷ where artistic and civic needs «do necessarily not run contrary to the dictates of modern living»¹⁸. On the other hand, the irregularities are actively exploited, which meant following the lie of the land with its ever-changing prospects. The Swedish hybridation of residential spatial features, such as “closes”, “cul-de-sacs” and “quadrangles” which Unwin carefully illustrated in *Town Planning in Practice* (1909) made this possible. As he commented, the state of cities at that time showed that any sort of «amenities of life»¹⁹ was neglected. Beyond improving sanitary conditions, «there is also needed the vivifying touch of art, which would give completeness and increase their value tenfold; there is needed just that imaginative treatment which could transform the whole»²⁰.

Like *Röda Bergen*'s other large courtyard blocks, *Humleboet* (Figure 3) is a combination of modest-scale buildings and extensive area of parkland and countryside²¹. In the first layout, Hallman gave a particular care in distinguishing private greeneries from collective ones. Later, he actively participated in the debate about increasing green areas into the courtyards and reducing the separation walls, feature of the high-dense perimeter blocks. Conceiving the neighbourhood as a whole in terms of land laws and design principles also permitted the interactions between the inhabitants who started to appreciate living together²².

The revised urban plan stipulated a medium density corresponding to 3-4 storey apartment buildings. Most of *Humleboet*'s blocks respect this rule, except for the buildings along the Eastern perimeter, which are 7-storeys. The five architects built 389 dwelling units: most of them are 1 room plus kitchen/kitchenette and toilette; in the cases where shower and bathroom were not included in the apartment, they were in the basement as a communal utility.

The case-study is characterized by three green courtyards differing in size, geometry and usage²³. On the east side towards the roundabout, the head of *Humleboet* has a rectangular green area in common with the facing block. Initially, the centre of this area was conceived as a small kindergarten, but this was never built. This function has been kept to the present: it is a planted area equipped with facilities for a playground area. Strolling down the two-lane planted alley of the *cul-de-sac* one passes the ground-floor archway-passage – accessible to vehicles and pedestrians – which divides the T-shape block to the U-shape ones. The one-way street that runs along one of the two parallel bars is delimited, on the right, by an irregular trapezoidal plot which follows the slope of the terrain (Figure 4).

The 1928 picture shows how the topography of site was cleverly used in the design process. Running along the buildings there is still a 10-metre strip of private gardens with drying racks, benches, flowerpots and pergolas. What does not exist anymore is gardening sheds and tiny vegetable gardens (Figure 5). There is still the same elliptical playground area, rather more fully equipped than the 1920s (Figure 6). Even though the size of open area is generous, the overall impression is intimacy provided by the protective ring of 3-4 storey blocks. Lastly, the rectangular courtyard between two parallel blocks – actually for private use – was designed by the Swedish landscape architect Ester Claesson²⁴. It was conceived as a series of green spaces: some gave an impression of cosiness and harmony; others were for vegetable gardens. The original layout has been modified, but the purpose is still for socializing and cultivating.

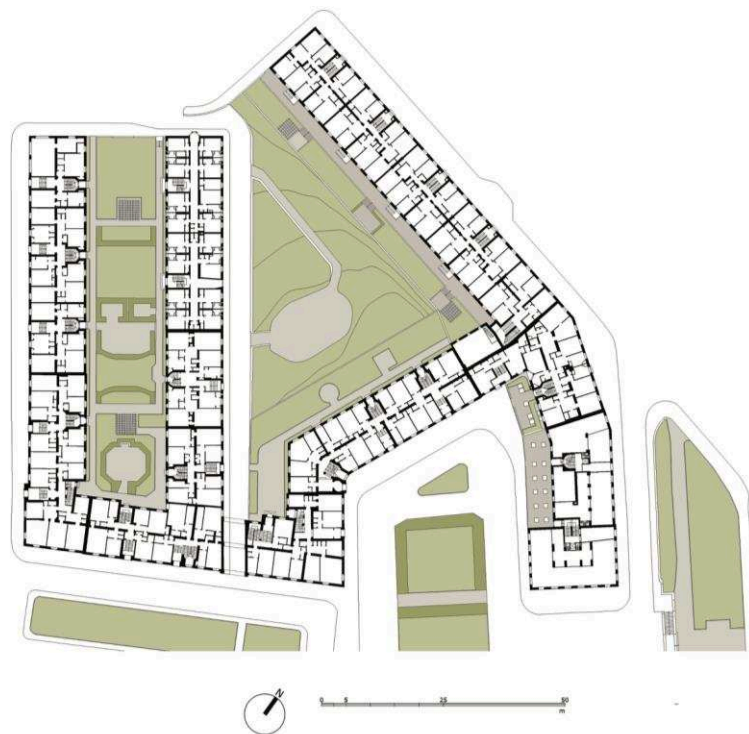


Figure 3. Humleboet, ground floor plan

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Figure 4. Humleboet, trapezoidal courtyard: collective spaces and private gardens, 1928

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Figure 5. Humleboet, path and street dialogue with the collective sloping area

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Figure 6. Humleboet, beyond the fence: the elliptic playground area

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VIENNA

In 1922-1925, Heinrich Schmid and Hermann Aichinger designed the *Fuchsenfeldhof*²⁵, which was the first building entirely conceived as a *Hof* according to the city's planning guidelines for communal housing blocks²⁶. Although scheduled for 1919, it was the first building to be built with the *Wohnbausteuer* of the first municipal program in 1923²⁷. It can therefore be considered one of the first interventions of Viennese housing policy²⁸.

The building site is in Meidling²⁹, which became industrialized throughout the 19th century. Brickworks, textile and also metalwork factories were located there, leading to speculative building of tenement blocks. Thus, the urban plot of *Fuchsenfeldhof* had been partially built upon before the city acquired it in 1922³⁰. The complex was erected in two phases. The first began in 1922 and included 212 apartments, several shops and workshops, the city's cooperative stores, a child-care facility, a central steam-powered laundry and communal baths. These functions were grouped in a 6-storey building around one courtyard, which occupied only the eastern side of the trapezoidal city block. In the second phase (1923-1924), it grew to encompass the rest of the entire city block, integrating two pre-war apartment buildings in the southwest corner. Grouped around three courtyards, the project added 267 apartments, four shops, two workshops, an instructional workshop, a kindergarten, a reading room, additional laundry and bathing facilities, playgrounds, a water pool and a new monumental entrance to the largest of the new courtyards. Two architects designed 481 apartments in the 6 and 7-storey buildings around a sequence of four collective courtyards.

The block shows a rational layout in its spatial organization and relationship with the urban fabric (Figure 2). The building considers the perimeter streets as limits. Tafuri stated *Fuchsenfeldhof* conveys the stiffness of the urban form, because it is not able to modify the rigid plot shape³¹. This critical observation can be also interpreted differently: the rigidity of the urban form shows the ability of the block type to build new dwellings into the urban fabric without modifying the pre-existing general plan³². This feature allows the *Höfe* to interweave intricately with the historic city. It is no coincidence that Werner Hegemann appreciated the Viennese complexes, stating they were «typically urban in character [...]. Note, however, the pleasing variety of detail in each group, and the ingenious way in which the plans of the blocks are related to existing streets and open spaces»³³. In particular, the four enclosed courtyards of the *Fuchsenfeldhof* present valuable design solutions. Each is characterized by a different shape and volume variations. The relationship between the building and the size of the courtyard space is the special feature of the architects' handling of the collective programme.

The model of the large courtyard block has a long tradition in Vienna's history³⁴, and achieved a precise theoretical frame in two masters of Viennese architecture and town planning from the late 19th century: Camillo Sitte and Otto Wagner. Sitte theorised the large garden court in *Greenery within the City* (1900)³⁵: «The *sanitary greenery* should not be found amidst the dust and noise of the streets, but rather in the sheltered interior of large blocks of buildings, surrounded on all sides»³⁶. In line with good examples of historic cities and their suburbs, the courtyards contain recreational greenery that could be used as playgrounds, sports grounds and even markets. «What Sitte proposed here was nothing less than opening the formerly private ground of the urban block to the public – a strategy which later became important for the large *Höfe* of Red Vienna»³⁷. In his lecture on *The Metropolis* at the Urban Design Conference in New York (1910), Otto Wagner presented the apartment blocks³⁸ as the only appropriate housing typology for modern life, as opposed to the suburban detached houses: «The longed-for detached house in the still more longed-for garden city can never satisfy the popular need, since as a result of the pressure of economy in living expenses, of the increase and decrease in the size of families, of change of occupation and position in life, there must be constant shifting and

change in the desires of the masses. The needs which arise from such changing conditions can be satisfied only by rented apartment dwellings, and never by individual houses»³⁹. This statement is important, considering that architects of some of the largest and most significant Red Vienna buildings were students at the Wagner Academy ⁴⁰. In their turn, Schmid and Aichinger, the architects of the *Fuchsenfeldhof*, belonged to the so-called *Wagner Schule* ⁴¹. On the one hand, Sitte stresses the courtyard's spatial quality, on the other, Wagner focuses on the typology and urban features of the courtyard. Both principles coherently came together in the socialist housing programme⁴²: the *Hof* typology blends urban density with the advantages of multifunctional garden courtyards.

The ground floor of *Fuchsenfeldhof* features a fully integrated combination of garden areas, public entryways, access to collective facilities, circulation paths and apartments (Figure 7). The block emerges as an interaction between public, collective and private spaces, accommodating many facilities and functions. The building «is in fact both public and private, domestic and civic, its courtyard spaces are both open to the city and enclosed within its walls»⁴³. The sequence of four linked courtyards enhanced the size and the communal amenities (Figure 10); it also improved the urban character through two monumental gateways connecting the street to the internal public space. In this the *Fuchsenfeldhof* proved really innovative. It introduced a new spatial and functional quality into the urban district by incorporating public elements into the residential fabric. Despite using the well-established *Hof* typology, it was both larger and less densely built than the traditional and speculative Viennese apartment blocks. The spatial dimensions and the facilities in its courtyards made a key contribution to building practice in Vienna, demonstrating that Vienna's large courtyard blocks could embody Sitte and Wagner's urban theories and the social vision of "collective living", as stated in the housing programme. In recent years, *Fuchsenfeldhof* has been renovated adapting easily to contemporary living requirements. Most of facilities and common equipment in the courtyard have been preserved. Although the water pool (Figure 8) is nowadays used as a playground, the transformed elements have not altered the collective character after all (Figure 9).



Figure 7. *Fuchsenfeldhof*, ground floor plan

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Figure 8. Fuchsenfeldhof, swimming pool: the unexpected amenity, 1930

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Figure 9. Fuchsenfeldhof, collective space of the main courtyard

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Figure 10. *Fuchsenfeldhof*, sequence of arched passages

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CONCLUSION

Investigating *Humleboet* and *Fuchsenfeldhof* has shown how they still offer key suggestions for conceiving the collective space of the courtyard. Their legacy is all the more important nowadays since housing is such a central topic. They can be considered as models – if properly adapted – for contemporary architectural practice. The authors' re-drawings highlight the peculiar features of the outdoor spaces, and these are also summarised by the chart data (Table 1).

Table 1. Comparative data between two case studies

HUMLEBOET Stockholm		FUCHSENFELDHOF Vienna
389	Number of dwellings	481
11,084 m ²	Total surface	10,680 m ²
2,612 m ²	Greenery areas	1,008 m ²
1,089 m ²	Paved areas	3,371 m ²
0.54 (54%)	Land occupancy rate	0.59 (59%)
2.43	Site residential density	3.22

Although the two case-studies describe a similar plot surface, the density is significantly lower in the *Humleboet* due to the greater quantity of storeys in the *Fuchsenfeldhof*. Differences also concern the building features and the architectural layout of the courtyards as illustrated in the pictures. The percentage of green-paved areas is also interesting: in Stockholm, natural features are prominent, the unusual topography becoming an integral part of the project, whereas in Vienna the layout of the outdoor spaces is the result of careful design control. The comparison between old and recent pictures shows how in these courtyards common ground floor facilities and the outdoor equipment are still available for daily use⁴⁴.

Although they were designed almost one hundred years ago, they still lump together many individuals and families low on the social ladder into a large block with a shared courtyard, achieving a novel architectural urban unit. Secchi⁴⁵ sees such European examples of large courtyard blocks a common ground in the search for adequate forms of living together and the expression of democratic ideals. Today, the Viennese dwellings have been allocated to elderly people, members of the poorer class and immigrants to all of whom the municipality still guarantees a low rent⁴⁶. In Stockholm, the inhabitant's backgrounds vary, as in the beginning: elderly people, lower and medium class families, single workers and single parents share those blocks. What is more, the skilful design of the two developments has prevented the buildings from deterioration, and, on a larger scale, from the urban decline sadly affecting so many neighbourhoods of big European cities.

To some extent, the song *Why Can't We Live Together?* written by Timmy Thomas⁴⁷ in 1973 and designed to inspire a return to "living together", is here matched by architectural spaces conceived with the same community goal in mind.

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¹ See: Gropius, Walter. "Die Wohnformen: Flach-, Mittel- oder Hochbau?". *Das Neue Berlin*, 4 (1929), 74-80. May, Ernst. "Fünf Jahre Wohnungsbautätigkeit in Frankfurt am Main". *Das Neue Frankfurt*, 2-3, Febr-März (1930), 21-55.

² The two German architects summarized the typological evolution expressed by the motto previously cited (*vom Block zur Zeile*) in the well-known schemes. Gropius presented three schemes starting from a condensed block, later a regular large courtyard block and a bar settlement. While, May added an additional step to the three diagrams.

The same was also done by a group of young Swedish architects in the manifesto *acceptera* (1931).

³ From 1850 to 1930 Stockholm's population increased from 93,000 to 502,200 inhabitants, while Vienna shows a growth from 551,300 to 1,935,881 inhabitants. As the data show, Vienna is 4 times larger than the Swedish capital.

⁴ They were called *Hyrkasern* in Swedish and *Mietkasernen* in German. These were speculative buildings in the sense that till the First World War private construction was struck down and construction costs rose sharply due to material shortages and rationing. The flats were overcrowded and with limited sunlight due to considerably reduced size of the courtyards. Sanitary conditions were terrible: no bathrooms, no water and lighting and no facilities. The phenomenon of wooden barrack quarters or provisional shelters (*nödbostad*) was more widespread in Sweden.

⁵ First of all, Sweden needed a Building Decree (*Byggnadsstadgan*, 1874) and a Town Planning Act (*Stadsplanelagen*, 1909) to allow the municipality to purchase land from the Royal estates. From 1914 onwards, local communities established the *Bostadskommissionen* (Housing commission) and they also started to provide government subsidises for housing developments. The Tenant societies became vital organizations, as shown by the first cooperative (*Stockholms Kooperativa Bostadsförening*) established in 1916, but the driving market force was the *HSB - Hyresgästernas sparkasse - och byggnadsförening* (Savings and Construction Association of the Tenants) founded in 1923. Both of them are still managing the housing sector together with many others. Sanitary and design guidelines were finally regulated by the booklet *Praktiska och hygieniska bostäder* (1921).

In Vienna, the Building Code (*Bauordnung*, 1883) regulated the dwelling standards until 1930. Between 1922-1928 Vienna municipality succeeded in purchasing an extensive quantity of land (7,920 hectares) destined for housing purposes, approximately one-quarter of the total area of the city. The Federal Rent Control Act (*Mieterschutzgesetz*, 1922) expropriated all the landlord's income from rents and destroyed private building speculation. The Housing Construction Tax (*Wohnbausteuer*, 1923) created financial aid for two five-year building programmes (1923 and 1927).

⁶ See Wallander, Sven. "Våra arbetsuppgifter", *Vår bostad*, 1 (November, 1-3), 1924. To quote the beginning of the article published in the first issue: "If a family needs to live their lives in a dwelling, which does not offer the minimum of space and well-being, which is the prerequisite for human dignity, yes, then it is at risk".

⁷ See Gemeinde Wien (1929). Vienna municipality promoted its two housing programmes through booklets. In the first one it stated: "There are no breaks: therefore, the municipality must continue its building initiatives! After the second building program will be a third and a quarter ones [...]. The construction of healthy and affordable dwellings for large masses of populations has become a durable task of the municipality. It will not fail to fulfil this great duty".

⁸ About the quantity of dwelling units, Vienna municipality built 58,353 flats in the timespan 1923-1933. See Hautmann and Hautmann (1980). Regards to Stockholm the data are somewhat less precise in the sense that most case surveys were conducted on a national basis. For example, between 1916 and 1929, 129,800 housing units were built in 280 Swedish towns (See Bauer (1934)), of which approximately 70,452 in Stockholm and its suburbs (See USK - Stockholms stad, 1989). The data include all new buildings: garden settlements of small cottages in the suburban areas – result of the *egnahem* policy – and urban residential blocks.

The Housing census (*Allmänna bostadsräkningen år 1933*,

https://www.scb.se/Grupp/Hitta_statistik/Historisk_statistik/Dokument/SOS/Bostadsrakningen_1933.pdf)

illustrated a scenario of 750,000 dwelling units, of which those new residential units built in 1924-1933 constituted the 22% of the global amount investigated. The cooperatives built 17300 units in Stockholm in the period 1924 - 1933 (See Silk (1948)), particularly the HSB built approximately 4,960 units.

⁹ Curiously, from a language standpoint there are two slightly different words to describe the typology of the present study. In Swedish, the recent definition coined by the historian Björn Linn, *Storgårdskvarter*, corresponds exactly to the English one, while in German *Hof* stands only for the inner space, that is the courtyard.

¹⁰ The re-drawings are based on a careful analysis of original items which the authors of the present paper consulted in archives of Stockholm (*Arkitektur – och designcentrum*, *Stadsbyggnadsexpeditionen* and *Stadsarkivet*) and Vienna (*Baupolizei MA37-West*)

¹¹ See Grömlund, Otto. "Det nya Wien. Ett storartat kommunalt nybyggnadsarbete för lindrandet av bostadsnöden". *Vår bostad*, 4 (November), 1927, 12-14.

Here there are some key passages translated by paper's author: «When travelling the continent in search of cooperative buildings and new types of dwelling, one cannot go wrong in focusing on the city of Vienna. In actual fact, housing cooperatives did not exist there, but favourable policies provided the circumstances for the municipality to intervene vigorously and effectively, so that the formation of special organizations proved superfluous. In addition, Austria experienced a dramatic economic crisis that made it difficult for any private or cooperative agencies to intervene and, consequently, the municipality decided it was vital to tackle the housing shortage. What has been achieved in the last 5-6 years in this respect is extremely impressive and shows the municipal authorities in this area acted vigorously and promptly, wisely and socially, in order to create something new, something of value. During the next 5-year period, 25,000 apartments are planned to be run up. These residential buildings, which have attracted visitors from all over the civilized world, have been designed by the most distinguished architects, built of solid materials and located in various parts of the city. [...] Not 15% as was done before, but as much as 50% of the plot is reserved for courtyards. Inside these large blocks situated in the neighbourhood we now find beautiful, enclosed lawns, playgrounds for children and ponds on which they can even skate in winter. Airy gardening areas for the adults are missing, though. Everything is artistically designed, adorned with beautiful stone figures, and sometimes even a fountain in the middle. [...] Although the homes are small (most of the apartments have only 2- 3 rooms), the Viennese people are pleased with that, being used to much less. But these apartments do enjoy direct sunlight and good ventilation. [...] Construction makes use of all modern technical aids. The management of the municipal houses is centralized in the city's rental department and special offices in each housing complex maintain closer contact with the tenants [...] Vienna is fortunate to have had such excellent municipal leadership over the past few years. [...] Now the Danube metropolis is a good and educational example for other cities».

¹² At the end of 19th century, Stockholm called for new town plans shaping its appearance of a real metropolis. The *Lindhagenplanen* was clearly inspired by Hausmann's monumental renovation plan of Paris, but it was not completely realized because it did not utterly match with the morphology of the city.

¹³ Hallman was literally a pioneer in Swedish town planning theory and practice. He attended a town planning course in Berlin. He wrote and lectured extensively, and was the first professor of town planning at the Royal Institute of Stockholm (1897-1934). Together with Albert Lilienberg, he took part in the first Town Planning Conferences and, later on, after the First World War, they arranged the first *IFHTP* exhibition and seminar in Göteborg (1923). Hallman was also expert member of the Stockholm town planning committee, of which during 1922-1927 he became director.

¹⁴ They are the N-S Torsgatan and the Rödabergsgatan E-W.

¹⁵ Wallander built three big blocks, while G. Laurelius S. Kjellberg, P. Hedqvist and T. Kjellgren designed the other four. The HSB architects' office was responsible for a large number of dwellings in the *Röda Bergen*. In the specific case of *Humbleboet* only two blocks do not belong to HSB and they are in the East wing of the regular and stretched courtyard.

¹⁶ Most of the *Röda Bergen* lot names come from the Old Norse mythology, but also from surrounding nature as the case of *Humbleboet* which literally means "nest of bumblebees".

¹⁷ Porfyriou (1990, p. 103).

¹⁸ Collins (1986, p. 92). The present book contains the English translation of the Sitte's masterpiece entitled *Der Städtebau nach seinen künstlerischen Grundsätzen* (1889).

¹⁹ Unwin (1909, p. 4).

²⁰ Ibidem.

²¹ Parallel to Hallmann's great effort in renovating town planning ideals, one should also mention the prominent role of some members of the Social Democrat party sitting on Stockholm City Council, like the social reformer and women's rights activist Anna Lindhagen. She was a driving force in introducing "allotment gardens" and stressing how important carefully designed and equipped gardens are in urban housing developments. Most of her suggestions and proposals were published in *Koloniträdgårdar och planterade gårdar* (1916).

²² Lindhagen (1916, pp. 52-53). Her analysis and design suggestions provided in the last chapter ("Planterade gårdar"; trans. "Planted courtyard") were also supported by a Hallman speech dated 1916. The practise of building walls in the high-dense courtyards was the result of the speculative construction of tenement buildings.

²³ Access to both of the parallel blocks is through a rectangular green approach, whereas in all the other blocks the principal entrance is on the main street.

²⁴ She worked actively with the German architect Joseph Maria Olbrich at the artists' colony in Darmstadt, where she was the only woman at his office (1905-1907). She also did an internship at Paul Schultze-Naumburg's studio. Once she came back to Stockholm, she took part in many projects and competitions, collaborating for example with the English magazine *The Studio* and the German *Deutsche Kunst und Dekoration*. For a better understanding about the Swedish landscape architect, see Nolin, Catharina (2009).

²⁵ See Wiener Magistrat (1924).

²⁶ For how the English-speaking world received the policies and guidelines of the Viennese municipality, see Hardy (1934).

²⁷ The first drawings for the first phase of the *Fuchsenfeldhof* project, held at Baupolizei MA37-West, date back to 1919. The start to building was conditioned by acquisition of land and financing. For more information about the economic and administrative system, see the text of the first housing program Honey (1923). A detailed reconstruction of all historical and political events is provided by Gulick (1948).

²⁸ Usually, the *Metzleinstalerhof* is considered the first *Hof* of the Viennese experience. The courtyard block consists of a part designed by Robert Kalesa in 1919-1920 and a second one in 1923-1924 by Hubert Gessner. However, the *Metzleinstalerhof* was not yet included in the 1923 housing program. See *Metzleinstalerhof* (1924).

²⁹ It is one of Vienna's suburban districts (12th *Bezirk*).

³⁰ Blau (1999).

³¹ Tafuri (1980).

³² The *Höfe* are predominantly located in workers' areas where the urban fabric showed the signs of 19th century housing speculation. Their construction was based on the general urban plan of 1893, without any modifications to the urban structure as shown by Battisti (1975). For more information about the urban intervention tools, see Blau (1999).

³³ Hegemann (1938, p. 93).

³⁴ See Bobek and Lichtenberger (1986).

³⁵ This article appeared in 1900 in *Der Lotse: Hamburgische Wochenschrift für deutsche Kultur*. It was printed as an appendix in the German edition of 1909 of *City Planning according to Artistic Principles (Der Städtebau nach seinen künstlerischen Grundsätzen)*. The English translation of the article is available in Collins and Collins (1986).

³⁶ Collins and Collins (1986, p. 319).

³⁷ Sonne (2009, p. 77).

³⁸ ³⁸ In 1911 Otto Wagner also showed his urban vision of Vienna in *Die Grossstadt*. The site plan and aerial perspective for the XXII Vienna Municipal District project presented uniform residential blocks interspersed with monumental public buildings arranged along a central axis of green spaces.

³⁹ Wagner (1912, p. 498).

⁴⁰ Some famous architects, such as Josef Hoffmann, Josef Plečnik and Max Fabiani, also attended the Otto Wagner Academy. See Pozzetto (1979).

⁴¹ See Wenzl-Bachmayer (2010).

⁴² «In the communal buildings, at least 50% of the surface of the courtyard (*Hof*) is generally not built. [...] Careful attention is paid to making large courtyards in a way that they can provide ornamental gardens and that the sun can reach all the rooms as much as possible. The courtyard garden of the communal buildings guarantees lighting and ventilation of the houses, as well as, no less importantly, it offers playgrounds for children and rest areas for people» Gemeinde Wien (1929, p. 44).

⁴³ Blau (1999, p. 238).

⁴⁴ In the recent years, both the districts have been partially renovated proving easiness to adapt to contemporary requirements of sustainability. For example, in Stockholm the works consisted in replacing with energy-efficient windows whilst keeping the same framework and performing roof renovations by adding dormers similar to those in the original. In Vienna, they added an exterior insulation system which does not alter the original idiom or character of the façades or affect the replacement of windows. In addition, the dwellings designed at that time show great flexibility and a capacity for adapting to current living standards, which generally amounted to merging two or three of them together by a few operations.

⁴⁵ See Secchi (2013).

⁴⁶ About the contemporary housing policies in Vienna, see Stadt Wien-Wiener Wohnen (2016).

⁴⁷ <https://www.youtube.com/watch?v=cFU-FJzPE80>

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